METHOD AND APPARATUS FOR FORMULA EVALUATION IN SPREADSHEETS ON SMALL DEVICES

ABSTRACT

5   The present invention provides a method and apparatus for enabling a spreadsheet program with formula support on small devices (like PDAs) while minimizing the amount of memory space used by not only the program, but also by the accompanying compiled code during transfer of files from the desktop to the small devices. The present invention allows the user to download a spreadsheet file from the desktop to the small device via a conduit. A

10   conduit is any 2-way communication device which connects a desktop to a small device and allows the transfer of data. Since the operating system of the desktop and small device, like a PDA, are different, the present invention allows the conduit software to convert the data to be transferred in a format understandable by the respective programs of both the desktop and PDA. The present invention also allows the conduit software to evaluate and parse the formulas and

15   functions needed by the current file before the transfer. The present invention also allows the conduit software to generate compiled code for the functions needed by the current file before transfer. By letting the conduit software perform the tasks of evaluating and parsing the formulas, and generating compiled code, the present invention optimizes the limited amount of memory space that is so critical to a small device's operating speed and performance.